

Notice of Allowability

Application No.

10/654,740

Examiner

Alandra Ellington

Applicant(s)

RECIO ET AL.

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 8/22/05.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Jimmy Funke on 10/31/05.

3. The application has been amended as follows:

1. A position sensor, comprising:

a housing;

a main gear located within said housing;

a ring shield located within said housing, said ring shield comprising a ring shield wall;

a plate connected to said ring shield wall;

an axle connected to said plate in perpendicular relation thereto; and

an auxiliary gear located within said housing, said auxiliary gear rotatably mounted to said axle, said main gear being gearingly meshed with said auxiliary gear;

wherein said auxiliary gear is located external of said main gear with respect to the ring shield, wherein rotation of said main gear causes rotation of said auxiliary gear, and wherein said auxiliary gear is bearingly supported on said axle.

6. A position sensor, comprising:
 - a housing;
 - a main gear located within said housing;
 - a ring shield located within said housing, said ring shield comprising a ring shield wall;
 - a plate connected to said ring shield wall;
 - an axle connected to said plate in perpendicular relation thereto; and
 - an auxiliary gear located within said housing, said auxiliary gear being rotatably mounted to said axle, said main gear being gearingly meshed with said auxiliary gear;wherein said auxiliary gear is located external of said main gear with respect to the ring shield, wherein rotation of said main gear causes rotation of said auxiliary gear, and wherein said auxiliary gear is bearingly supported on said axle; and wherein said auxiliary gear is free of contact with respect to said ring shield.

Allowable Subject Matter

4. Claims 1-11 are allowed.
5. The following is an examiner's statement of reasons for allowance: The reasons for allowance are based on the inclusion of:
 - a. In claim 1, a ring shield located within a housing, the ring shield having a ring shield wall, a plate connected the ring shield wall, an auxiliary gear located external of a main gear with respect to the ring shield, wherein rotation of the

main gear causes rotation of the auxiliary gear, and wherein the auxiliary gear is bearingly supported by an axle.

b. In claim 6, a ring shield located within a housing, the ring shield having a ring shield wall, a plate connected the ring shield wall, an auxiliary gear located external of a main gear with respect to the ring shield, wherein rotation of the main gear causes rotation of the auxiliary gear, wherein the auxiliary gear is bearingly supported by an axle, and wherein the auxiliary gear is free of contact with respect to the ring shield.

c. In claim 10, a ring shield located within a housing, the ring shield having a ring shield wall having a low rise portion adjacent a main gear, and a high rise portion distally disposed in relation to the main gear, a plate connected to the high rise portion of the ring shield wall, wherein rotation of the main gear causes rotation of an auxiliary gear, wherein the auxiliary gear is bearingly supported on an axle, wherein the auxiliary gear is free of contact with respect to the ring shield, and wherein a wall edge of the ring shield wall demarcates the high and low rise portions, and wherein the plate is truncated by a truncation edge, the wall edge coinciding with the truncation edge.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(5,646,523) (6,367,337)

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alandra Ellington whose telephone number is (571) 272-2178. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alandra Ellington 10/31/05
Art Unit 2855

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PRIMARY EXAMINER